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CAUTION: BEFORE SERVICING THE CHASSIS, READ THE "X-RAY RADIATION PRECAUTION" "SAFETY PRECAUTION" ON PAGE 1 AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X - RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The normal value of the high voltage of this receiver is 29kV (27 ″)/26kV (25 ″) at zero beam current (minimum brightness) under a 120V AC power source. The high voltage must not, under any circumstances, exceed 32kV (27 ″)/30kV(25 ″).
2. Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended the reading of the high voltage be recorded as a part of service record. It is important to use an accurate and reliable high voltage meter.
3. This receiver is equipped with a Fail Safe (FS) circuit which prevents the receiver from producing an excessively high voltage even if the B+ voltage increases abnormally. Each time the receiver is serviced, the FS circuit must be checked to determine that the circuit is properly functioning, following the FS CIRCUIT CHECK procedure in this manual.
4. The primary source of X - RAY RADIATION in this TV receiver is the picture tube. For continuous X - RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
5. Some parts in this receiver have special safety-related characteristics for X - RAY RADIATION protection. For continuous safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

SAFETY PRECAUTION

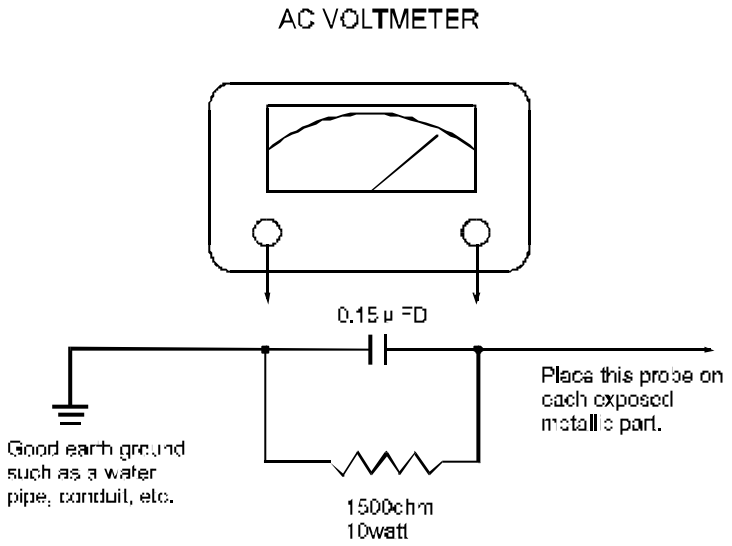
WARNING:

Service should not be attempted by anyone unfamiliar with the necessary precaution on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. Since the power supply circuit of this receiver is directly connected to the AC power line, an isolation transformer should be used during any dynamic service to avoid possible shock hazard.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as: non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.
4. When replacing parts or circuit boards, disconnect the power cord.
5. When replacing a high wattage resistor (oxiode metal film resistor) on the circuit board, keep the resistor 10mm (1/2in) away from circuit board.
6. Connection wires must be kept away from components with high voltage or high temperature.
7. If any fuse in this TV receiver is blown, replace it with the FUSE specified in the chassis parts list.

8. Before returning the set to your customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, terminals, screwheads, metal overlays, control shafts etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 120V AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner:

Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15 μF, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and 0.15 μF capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.3 volts RMS. This corresponds to 0.2 milliamp. AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

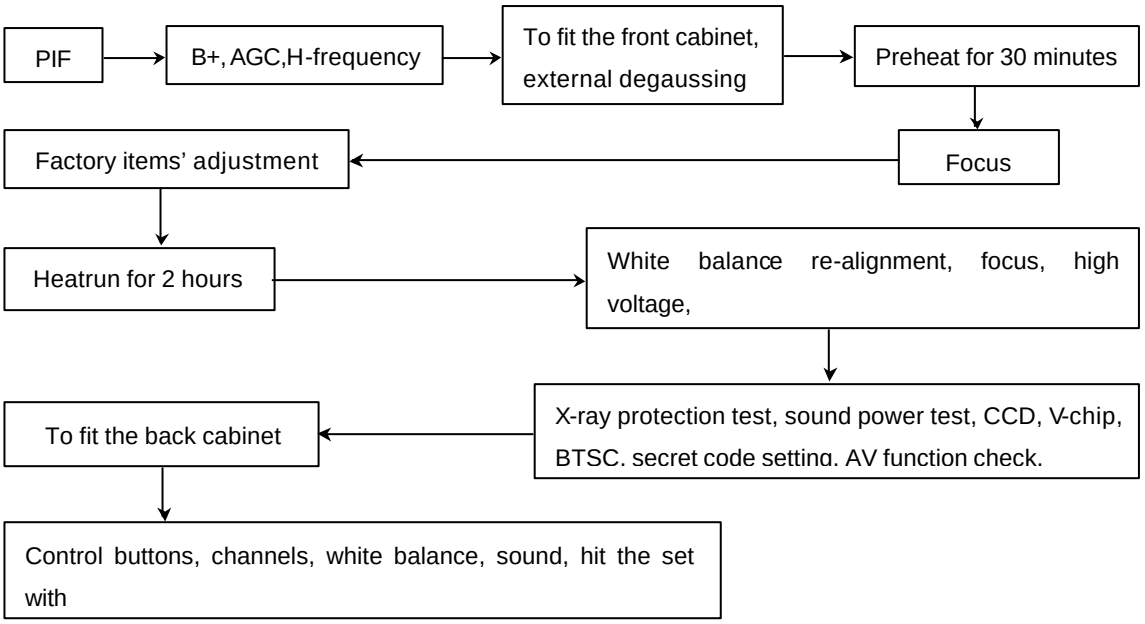


PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the X-RAY RADIATION protection afforded by them cannot necessarily be obtained by using replacement components rated for higher wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplement electrical components having such features are shaded on the schematic diagram and the parts list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same characteristic as specified in the parts list may create shock, fire, X-RAY RADIATION or other hazards.

THE ALIGNMENT FLOW CHART


PIF
B+, AGC,H-frequency
To fit the front cabinet, external degaussing
Preheat for 30 minutes
Focus
Factory items' adjustment
Heatrun for 2 hours
White balance re-alignment, focus, high voltage,
X-ray protection test, sound power test, CCD, V-chip, BTSC. secret code setting. AV function check.
To fit the back cabinet
Control buttons, channels, white balance, sound, hit the set with

INSTALLATION AND SERVICE ADJUSTMENTS

GENERAL

In the majority of cases, a color television receiver will need only slight touch-up adjustment upon installation. Check the basic characteristics such as FS、EHV and focus. Observe the picture for good black and white details without objectionable color shading. If color shading is evident, demagnetize the receiver.

If color shading still persists, perform purity and convergence adjustments. This should be all that is necessary to achieve optimum receiver performance.

FOCUS ADJUSTMENT

Adjust the FOCUS control (on T431) for well defined scanning lines on the picture screen.

HIGH VOLTAGE CHECK

CAUTION: These is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

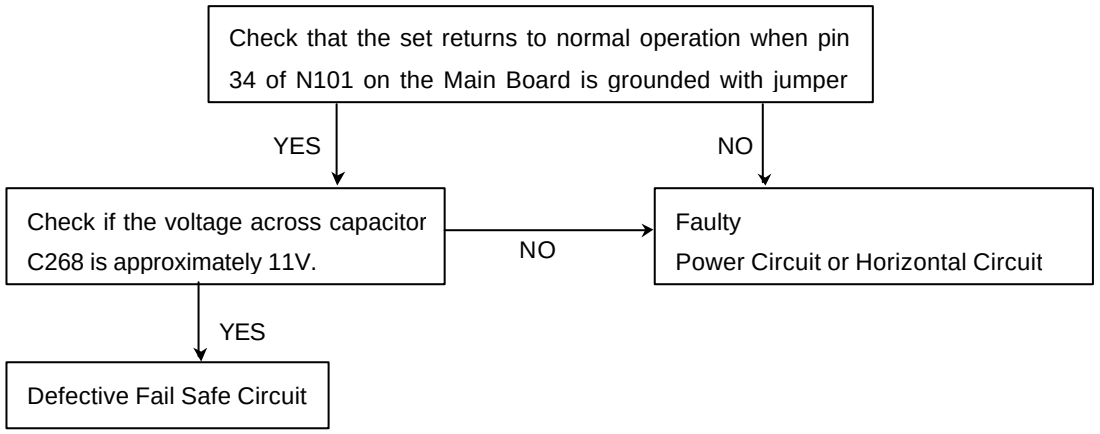
1. Connect an accurate high voltage meter to the second anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST controls to minimum (zero beam current).
3. High voltage will be measured below 29(27″)/26(25″)kV.
4. Vary the BRIGHTNESS control to both extremes to be sure the high voltage does not exceed the limit under any conditions.

FS CIRCUIT CHECK

The Fail Safe (FS) circuit check is indispensable for the final check in the servicing. Checking should be done following the steps below.

1. Turn the power switch on and adjust customer controls for normal operation.
2. Temporarily short TP11 and TP12 on the Main Board with a jumper wire. Raster and sound will disappear.
3. The receiver must remain in this state even after removing the jumper wire. This is the evidence that the FS circuit is functioning properly.
4. To obtain a picture again, temporarily turn the receiver off and allow the FS circuit more than 30 seconds to reset. Then turn the power switch on to produce a normal picture.

Troubleshooting Guide for Fail Safe Circuit


Check that the set returns to normal operation when pin 34 of N101 on the Main Board is grounded with jumper
YES
NO
Check if the voltage across capacitor C268 is approximately 11V.
NO
Faulty
Power Circuit or Horizontal Circuit
YES
Defective Fail Safe Circuit

PIF alignment

1) Apply DC 5V±0.1V to TP4 test point, apply DC 12V±0.1V to TP3 test point, connect TP6 test point to GND.
2) Apply 80dBμ, 45.75MHz RF signal to the tuner's TP9 test point through a 1000P ceramic capacitor. Connect the DC voltameter's ⊕ pole to LA76814 pin 47 (TP8), ⊙ pole to TP10.

Note: For LA76814 ES01 version, the voltameter's ⊕ pole should connect to pin50 (TP7).

3) Adjust T202 with a non-inductive screwdriver until the reading on the DC voltameter is DC 3.6V±0.01V.

B+ CHECK

1) Prepare the test equipment.
2) Use the DC voltameter at DC 200V position to test VD531⊕, i.e. B+.
3) Connect the power plug to AC 120V/60Hz, turn on the power switch, wait for normal raster, then adjust VR501 to make B+ = 140V±0.5V.

Test point	VD531⊕	VD530⊕	VD524⊕	VD516⊕	VD510⊕	TP2	TP3	TP4
DC(V)	140	25	15	9.5	14	5	12	5

TEST EQUIPMENT

1) DC regulated power supply PAB18-1.8
2) Audio voltameter
3) Oscilloscope
4) High-voltage meter
5) Digital multimeter
6) AC voltameter

TEST MODE SET(CHECK)

TEST MODE ADJUSTMENT INSTRUCTION

TEST MODE adjustment is a special adjustment which is controlled by I^2C BUS. The TV set has been set at optimum mode at the factory. Except for special need, such as replacing CRT、MEMORY、IC etc., it is hoped not to adjust it. To conduct TEST MODE's adjustment, please do it according to the following steps:

1) Tune in an active channel. Within 4 seconds, press the SLEEP、MUTE、DSP、MENU button on the remote controller one by one to enter into TEST MODE (on the screen is displayed TEST MODE MENU).
2) According to the indication on the MENU, press the CH▲/" button to select needed adjustment item. Then use the VOL▲/" button to adjust.
3) Press DSP、or SLEEP button to exit TEST MODE.

AGC DELAY ADJUSTMENT

1. Tune in the strongest station in your area.
2. Enter into the TEST MODE menu RF AGC DELAY item, press the VOL▲/" button until snowy noise just disappears from the screen.

Horizontal frequency alignment (only for LA76814 ES(Engineering Sample) version. For others there is no need to adjust.)

1) Connect the frequency counter to LA76814 (N101) pin 27.
2) Enter into the H.AFC item, press the VOL▲/" button to make the value is 0.
3) Enter into the H.FREQ item, press the VOL▲/" button to adjust the level until the reading on the frequency counter is 15734±2Hz.
4) Enter into the factory menu H.AFC item, press the VOL▲/" button to make the value is 1.

H-blanking、 H-center adjustment

1）Receive test signal, enter into the H.PHASE item, adjust the value to 0; then enter into H.BLK.SW item, adjust the value to 0.
2）Enter into the H.BLK.R/L item, adjust the level to make the H-blanking amount on the right screen at an appropriate position.
3）Enter into H.PHASE item, adjust the value to 31, then enter into the H.BLK SW item, adjust the value to 1.
4）Enter into the H.BLK R/L item, adjust the level to make the H-blanking amount on the left screen at an appropriate position.
5）Enter into the H.PHASE item, adjust the level to make the left and right picture symmetrical.

H – Size, E/W correction

Receive test signal, adjust R425 to make Horizontal size right, and adjust R426 to make E/W correction right.

V-amplitude、linearity 、S-correction、center adjustment

1) Receive test signal, enter into the V.POSI item, adjust the value to make V-center and the CRT's geometric center is in accordance. Enter into the V.SIZE item, adjust the value to make the overscan is ≤10%, enter into the V.COMP item, adjust the value to 7.
2) Receive test signal, enter into the V.LINE item, adjust the value to make the upper and lower grid's (on the screen) vertical distance equal. Enter into the V.SC item, adjust the value to make the vertical distance from upper grid to middle screen is equal to the vertical distance from lower grid to middle screen.
3) Repeat the above steps 1) & 2) to make the V-center、V-amplitude、V-linearity at the optimum mode.

White balance、screen 、sub-brightness adjustment

A. Dark balance、screen 、sub-brightness adjustment

1) Receive test signal, adjust the TEST MODE menu's G.BIAS、B.BIAS to 0, SUB BRIGHT to 64, BLACK STR=0, BLUE GAMMA=2, R/G GAMMA=0. Adjust the analog of brightness、contrast、color in the picture menu to 0.
2) Connect the Oscilloscope's probe to R gun on the CRT board, adjust the R.BIAS & SUB BRIGHT in the TEST MODE menu to make the R signal's cut-off level as 180V.
3) Receive a station which has no signal, turn the SCREEN potentiometer on the FBT counter-clockwise to minimum, adjust the V.KILL in the factory menu to 1.
4) Adjust the SCREEN potentiameter clockwise until a slight bright horizontal line appears on the screen.
5) Press the VOL▲/" button, set V.KILL=0 to make vertical circuit works normal.
6) Respectively adjust G.BIAS & B.BIAS until X=0.281, Y=0.311 (9300 ° K+27).

B. Bright balance adjustment

1) Receive more than 60dBμ signal.
2) Set the brightness、contrast to maximum, color to minimum, adjust R.DRIVE、G.DRIVE、B.DRIVE to obtain even white balance.

C. White balance check and re-alignment

Since the adjustment of the bright & dark balance affects each other, please check and adjust the bright & dark balance according to the above steps A、B repeatedly until even white balance can be obtained when the contrast control changes from minimum to maximum. The TEST MODE menu's SIGNAL item can be used to check.

Note: SIGNAL = 0 normal
SIGNAL = 1 100% BLACK LEVEL
SIGNAL = 2 100% WHITE LEVEL
SIGNAL = 3 60% WHITE LEVEL

Sub-tint adjustment

Receive test signal, adjust the tint control to middle (0), adjust the SUB TINT item in the TEST MODE menu to obtain more natural and realer color.

TEST MODE MENU LIST

A. Pressing remote key " SLEEP+MUTE+DSP+MENU" to activate the TEST MODE menu.

TEST MODE

Name		Value	Default	Function	Control
NO.1	H.FREQ	0-63	31	Align ES Sample H-frequency	[H.FREQ]
*NO.2	H.PHASE	0-31	16	Align sync to flyback phase	[H.PHASE]
NO.3	H.AFC	0/1	1	H-sync gating on/off	[AFC]
*NO.4	H.R/L	0/1	0	Blanking control select(R/L)	[H.BLK.SW]
*NO.5	H.BLK	0-7	4	H-Blanking control	[H.BLK.R&L]
*NO.6	V.SIZE	0-127	117	Align vertical amplitude	[V.SIZE]
*NO.7	V.LINE	0-63	13	Align vertical linearity	[V.LIN]
*NO.8	V.POSI	0-63	32	Align vertical DC bias	[V.POSI]
*NO.9	V.SC	0-31	11	Align vertical S-correction	[V.SC]
NO.10	V.COMP	0-7	7	Align V-size compensation	[V.COMP]
NO.11	CD.MODE	0/1	0	Select vertical countdown mode	[CD.MOD]
NO.12	SIGNAL	0-3	0	Service TEST signal(B/W/Cross)	[CROSS B/W]
NO.13	V.KILL	0/1	0	Disable vertical outputs	[]V.KILL
NO.14	C.KILL	0/1	0	Disable color display	[C.KILL.OFF]
NO.15	SUB CON	0-27	27	Factory contrast preset	[CONTRAST]
NO.16	SUB CON	0-27	14	Factory color preset	Factory preset
NO.17	SUB BRI	0-127	100	Align common RGB DC level	[SUB.BRIGHT]
NO.18	SUB TINE	0-77	30	Factory color preset	Factory preset
NO.19	COL ANGLE	0-15	7	Adjust R-Y/B-Y angle	[R Y/B Y ANGLE]
*NO.20	R.BIAS	0-255	127	Align red out DC level	[R.BIAS
NO.21	G.BIAS	0-255	200	Align green out DC level	[G.BIAS]
*NO.22	B.BIAS	0-255	119	Align blue out DC level	[B.BIAS]
*NO.23	R.DRIVE	0-127	79	Align red out AC level	[R.DRIVE]
NO.24	G.DRIVE	0-15	15	Align green out AC level	[G.DRIVE]
*NO.25	B.DRIVE	0-127	68	Align blue out AC level	[B.DRIVE]
NO.26	CORING	0/1	1	Enable luminance coring	[CORING]
NO.27	BLACK STR	0/1	0	Disable black stretch	[BLK.STR.DEFF]
NO.28	BLUE GAMMA	0-3	2	Select blue Gamma gain	[B.r.SELECT]
NO.29	R/G GAMMA	0/1	0	Disable R/G Gamma correction	[RG.r.SELECT]
NO.30	BRI THR	0-7	7	Align BRI ABL threshold	[BRI.ABL.THR]
NO.31	EMG ABL	0/1	1	Disable emergency BRI ABL	[EMG.ABL.DEF]
NO.32	BRI ABL	0/1	1	Disable brightness ABL	[BRI.ABL.DEF]
NO.33	BRI MID	0/1	1	Disable brightness mid stop	[MID.STD.DEF]
NO.34	VIDEO LEVEL	0-7	7	Align IF video level	[VIDEO LEVEL]
NO.35	SOUND TRAP	0-7	4	Align sound IF trap	[TRAP TEST]
NO.36	FM LEVEL	0-31	15	Align WBA output level	[FM..LEVEL]
*NO.37	RF.AGC	0-63	20	Align RF AGC threshold	[RF.AGC]
NO.38	TUNER TYPE	0/1	0	Tune type option	SOFT SW
NO.39	VIDEO INPUT	0/7	7	Video source select	SOFT SW

NOTE:All the items sign with " * " can adjust to different value for different TV set.

B. VIDEO INPUT soft option truth table.

VIDEO INPUT	AV SOURCE	COMB FILTER	AV SW	FUNCTION
0Hex=000Bit	one	no	internal	13″ / 20″
1Hex=001Bit	one	no	internal	13″ / 20″
2Hex=010Bit	one	no	internal	13″ / 20″
3Hex=011Bit	one	no	internal	13″ / 20″
4Hex=100Bit	one	no	external	25″ / 27″
5Hex=101Bit	one	yes	external	25″ / 27″
6Hex=110Bit	two	no	external	25″ / 27″
7Hex=111Bit	two	yes	external	25″ / 27″

NOTE: a. If AV SOURCE is one, it can only select one AV in; if AV SOURCE is two, it can select AV1 or AV2 in, and OSD display as "TV-AV1-AV2-TV".

b. If COMB FILTER is used, [C.EXT]=1, and [FILTER SYS] set NO TRAP.

c. If AV SW is external, using BA7613N, and [VIDEO SW]=1, if AV SW is internal, using LA76814 internal video switch for TV/AV.

C. In TEST MODE pressing " MENU" again, activate SOUND ADJUST MENU.

SOUND ADJUST MENU

Name	Range	Default	Description
COMPOSITE SIGNAL	0 – 15	10	Input level adjust
STEREO NOISE–TH	0 – 15	8	Noise threshold for stereo
SAP NOISE–TH	0 – 15	8	Noise threshold for SAP
TIMING CURRENT	0 – 7	4	Timing current alignment data
PILOT THRESHOLD	0/1	1	Pilot threshold stereo on
BTSC ADJUST	READY/AUTO		AUTO adjust function

CONVERGENCE MAGNET ASSEMBLY POSITIONING

Convergence magnet assembly and rubber wedges need mechanical positioning. Refer to below figure 1.

A. COLOR PURITY ADJUSTMENT

NOTE: Before attempting any purity adjustment, the receiver should be operated for at least fifteen minutes.

1. Demagnetize the picture tube and cabinet using a degaussing coil.
2. Set the CONTRAST and BRIGHTNESS controls to the maximum.
3. Receive PM5515 monochromatic signal (such as G)to provide a green raster on the screen.
4. Loosen the clamp screw holding the yoke, and slide the yoke backward to provide vertical green belt (zone) in the picture screen.
5. Remove the Rubber Wedges.
6. Rotate and spread the tabs of the purity magnet (see figure 2)around the neck of the picture tube until the green belt is in the center of the screen. At the same time, center the raster vertically by adjusting the magnet.
7. Move the yoke slowly forward or backward until a uniform green screen is obtained. Tighten the clamp screw of the yoke temporarily.
8. Check the purity of the red and blue raster.

9. Obtain a white raster, referring to " CRT WHITE BALANCE ADJUSTMENT ".
10. Proceed with convergence adjustment.

B. CONVERGENCE ADJUSTMENT

NOTE: Before attempting any convergence adjustments, the receiver should be operated for at least fifteen minutes.

■ CENTER CONVERGENCE ADJUSTMENT

1. Receive crosshatch pattern with a color bar signal generator.
2. Adjust the BRIGHTNESS and CONTRAST controls for well defined pattern.
3. Adjust two tabs of the 4-Pole Magnets to change the angle between them (see figure 2)and superimpose red and blue vertical lines in the center area of the picture screen.(see figure 3)
4. Turn the both tabs at the same time keeping the constant angle to superimpose red and blue horizontal lines at the center of the screen.(see figure 3).
5. Adjust two tabs of 6-Pole Magnets to superimpose red/blue line with green one. Adjusting the angle affects the vertical lines and rotating both magnets affects the horizontal lines.
6. Repeat adjustments 3,4,5, keeping in mind red, green and blue movement, because 4-Pole Magnets and 6-Pole Magnets interact and make dot movement complex.

■ CIRCUMFERENCE CONVERGENCE ADJUSTMENT

1. Loosen the clamping screw of deflection yoke to allow the yoke to tilt.
2. Put a wedge as shown in figure 1 temporarily. (Do not remove cover paper on adhesive part of the wedge.).
3. Tilt front of the deflection yoke up or down to obtain better convergence in circumference. (See figure 3). Push the mounted wedge into the space between the picture tube and the yoke to hold the yoke temporarily.
4. Put other wedge into bottom space and remove cover paper to stick..
5. Tilt front of the yoke right or left to obtain better convergence in circumference (see figure 3)

6. Keep the yoke position and put another wedge in either upper space. Remove cover paper and stick the wedge on the picture tube to fix the yoke.
7. Detach the temporarily mounted wedge and put it in another upper space. Stick it on the picture tube to fix the yoke.
8. After fixing three wedges, recheck overall convergence. Tighten the screw firmly to fix the yoke tightly in place.
9. Stick three adhesive tapes on wedges as shown in figure 1.

USA CHANNEL FREQUENCY TABLE (181 CH)

P IF=45.75 MHz
C IF=42.17MHz
S IF=41.25MHz
UNIT: MHz

BAND	CHANNEL	P CARRIER	S CARRIER	LOCAL
VHF Low	2	55.25	59.75	101
	3	61.25	65.75	107
	4	67.25	71.75	113
	5	77.25	81.75	123
	6	83.25	87.75	129
	A-6	85.25	89.75	131
	A-5	91.25	95.75	137
	A-4	97.25	101.75	143
	A-3	103.25	107.75	149
	A-2	109.25	113.75	155
	A-1	115.25	119.75	161
	A	121.25	125.75	167
	B	127.25	131.75	173
VHF High	C	133.25	137.75	179
	D	139.25	143.75	185
	E	145.25	149.75	191
	F	151.25	155.75	197
	G	157.25	161.75	203
	H	163.25	167.75	209
	I	169.25	173.75	215
	7	175.25	179.75	221
	8	181.25	185.75	227
	9	187.25	191.75	233
	10	193.25	197.75	239
	11	199.25	203.75	245
	12	205.25	209.75	251
	13	211.25	215.75	257
	J	217.25	221.75	263
	K	223.25	227.75	269
	L	229.25	233.75	275
	M	235.25	239.75	281
	N	241.25	245.75	287
	O	247.25	251.75	293
	P	253.25	257.75	299
	Q	259.25	263.75	305
	R	265.25	269.75	311
	S	271.25	275.75	317
	T	277.25	281.75	323
	U	283.25	287.75	329
	V	289.25	293.75	335
	W	295.25	299.75	341
	W+1	301.25	305.75	347
	W+2	307.25	311.75	353
	W+3	313.25	317.75	359
	W+4	319.25	323.75	365
	W+5	325.25	329.75	371
	W+6	331.25	335.75	377
	W+7	337.25	341.75	383
	W+8	343.25	347.75	389
	W+9	349.25	353.75	395
	W+10	355.25	359.75	401

BAND	CHANNEL	P CARRIER	S CARRIER	LOCAL
UHF	W+11	361.25	365.75	407
	W+12	367.25	371.75	413
	W+13	373.25	377.75	419
	W+14	379.25	383.75	425
	W+15	385.25	389.75	431
	W+16	391.25	395.75	437
	W+17	397.25	401.75	443
	W+18	403.25	407.75	449
	W+19	409.25	413.75	455
	W+20	415.25	419.75	461
	W+21	421.25	425.75	467
	W+22	427.25	431.75	473
	W+23	433.25	437.75	479
	W+24	439.25	443.75	485
	W+25	445.25	449.75	491
	W+26	451.25	455.75	497
	W+27	457.25	461.75	503
	W+28	463.25	467.75	509
	W+29	469.25	473.75	515
	14	471.25	475.75	517
	15	477.25	481.75	523
	16	483.25	487.75	529
	17	489.25	493.75	535
	18	495.25	499.75	541
	19	501.25	505.75	547
	20	507.25	511.75	553
	21	513.25	517.75	559
	22	519.25	523.75	565
	23	525.25	529.75	571
	24	531.25	535.75	577
	25	537.25	541.75	583
	26	543.25	547.75	589
	27	549.25	553.75	595
	28	555.25	559.75	601
	29	561.25	565.75	607
	30	567.25	571.75	613
	31	573.25	577.75	619
	32	579.25	583.75	625
	33	585.25	589.75	631
	34	591.25	595.75	637
	35	597.25	601.75	643
	36	603.25	607.75	649
	37	609.25	613.75	655
	38	615.25	619.75	661
	39	621.25	625.75	667
	40	627.25	631.75	673
	41	633.25	637.75	679
	42	639.25	643.75	685
	43	645.25	649.75	691
	44	651.25	655.75	697
	45	657.25	661.75	703

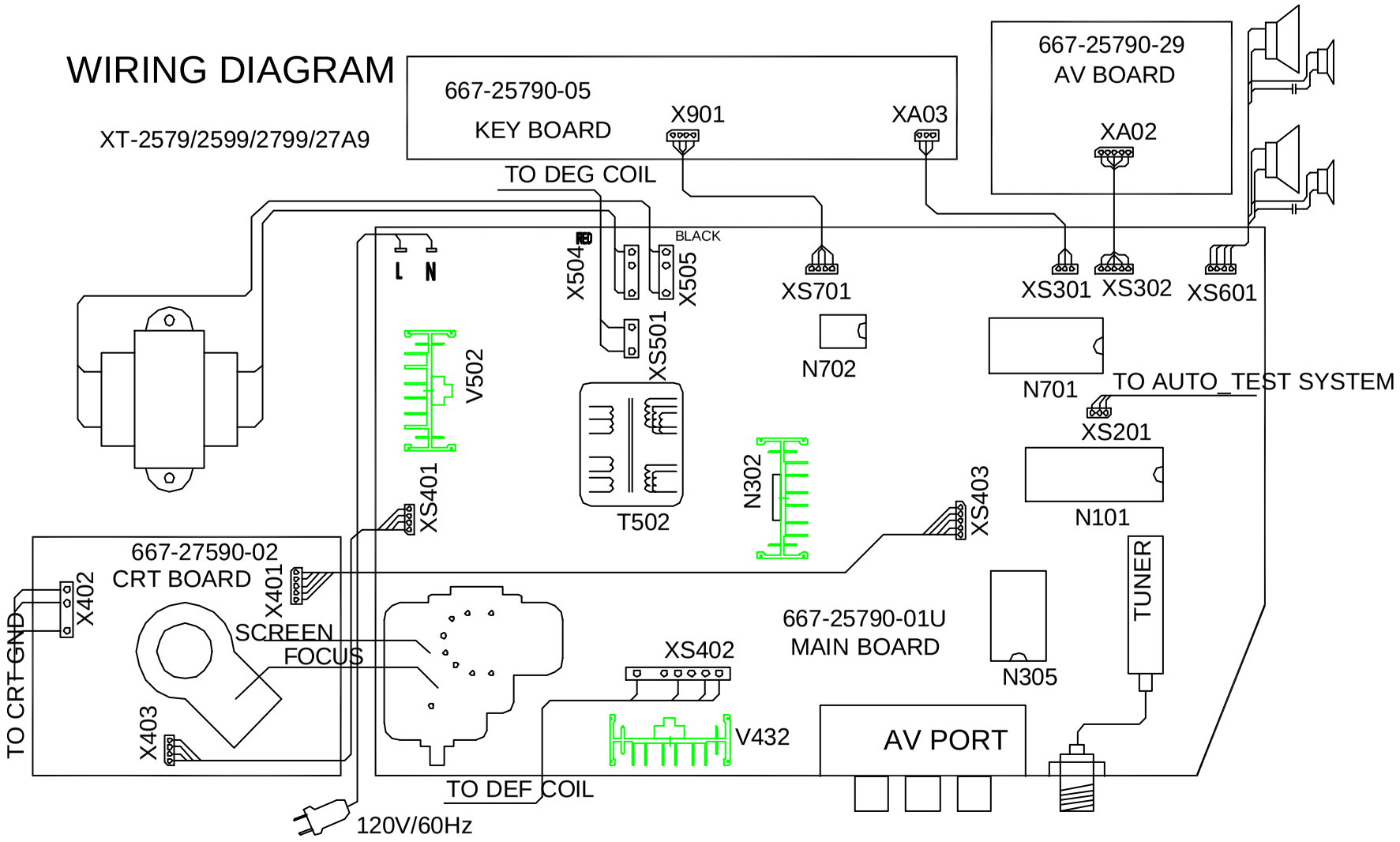
USA CHANNEL FREQUENCY TABLE (181 CH)

P IF=45.75 MHz
C IF=42.17MHz
S IF=41.25MHz
UNIT: MHz

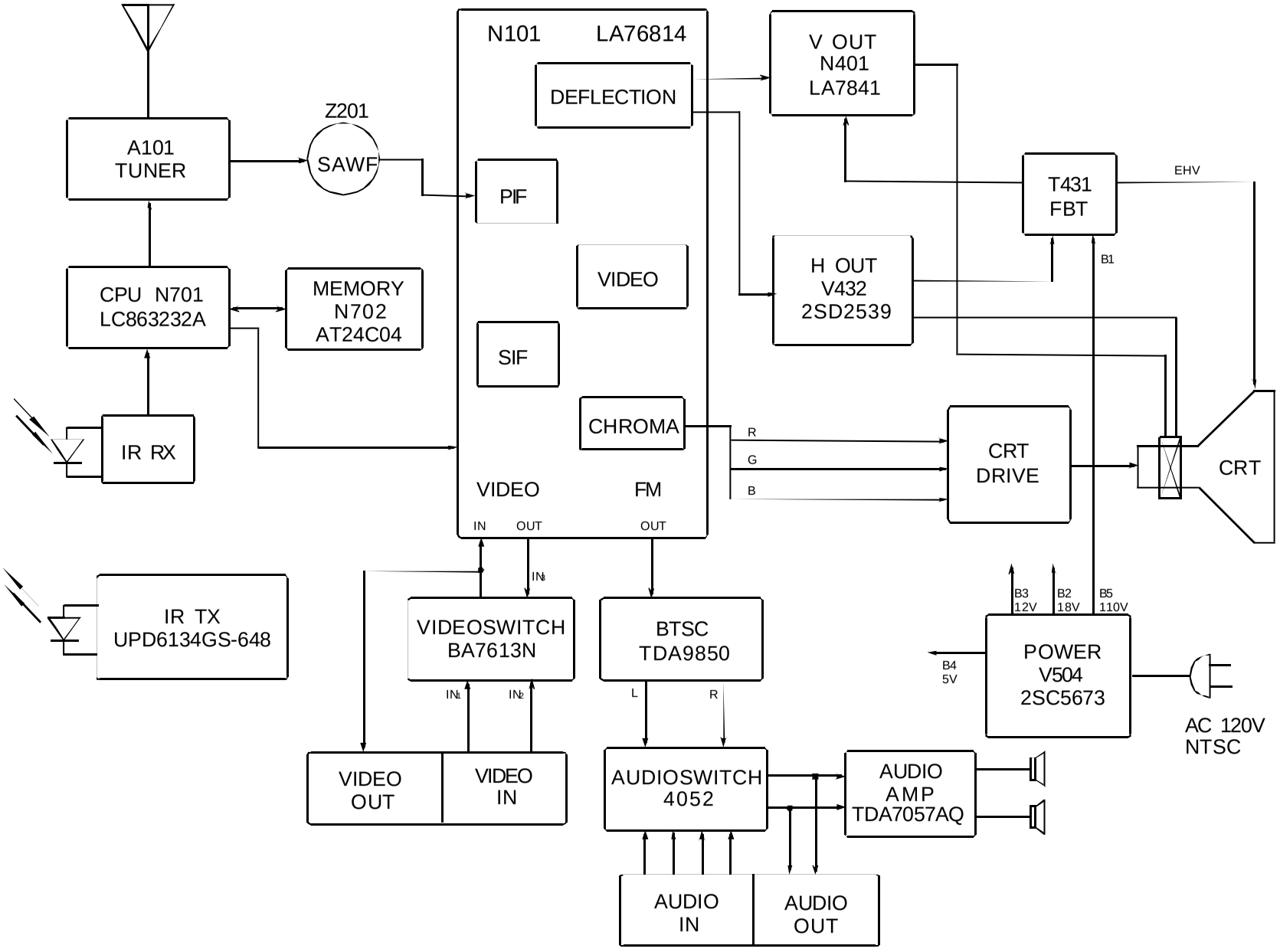
BAND	CHANNEL	P CARRIER	S CARRIER	LOCAL
UHF	46	663.25	667.75	709
	47	669.25	673.75	715
	48	675.25	679.75	721
	49	681.25	685.75	727
	50	687.25	691.75	733
	51	693.25	697.75	739
	52	699.25	703.75	745
	53	705.25	709.75	751
	54	711.25	715.75	757
	55	717.25	721.75	763
	56	723.25	727.75	769
	57	729.25	733.75	775
	58	735.25	739.75	781
	59	741.25	745.75	787
	60	747.25	751.75	793
	61	753.25	757.75	799
	62	759.25	763.75	805
	63	765.25	769.75	811
	64	771.25	775.75	817
	65	777.25	781.75	823
	66	783.25	787.75	829
	67	789.25	793.75	835
	68	795.25	799.75	841
	69	801.25	805.75	847

WIRING DIAGRAM

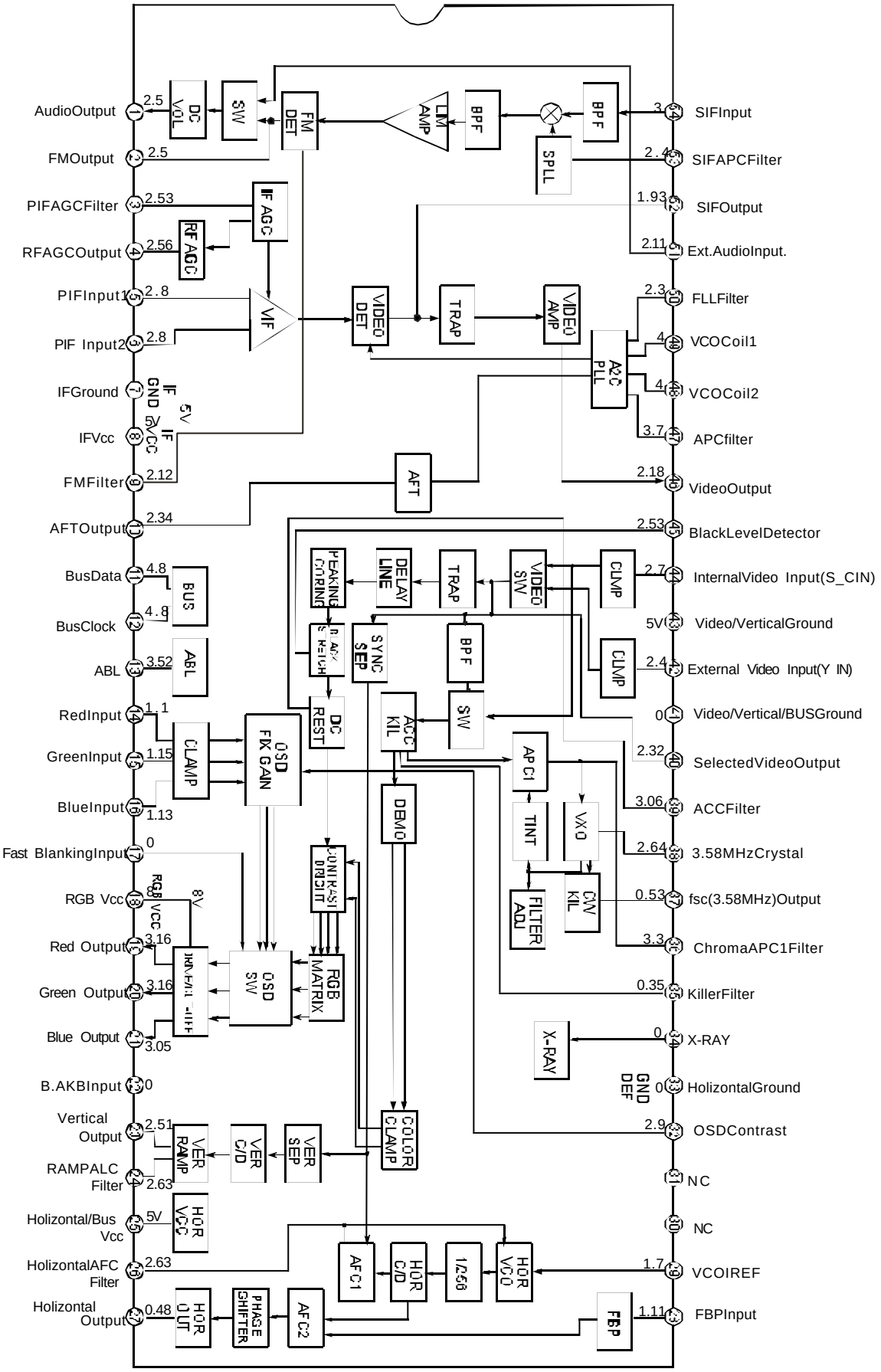
XT-2579/2599/2799/27A9



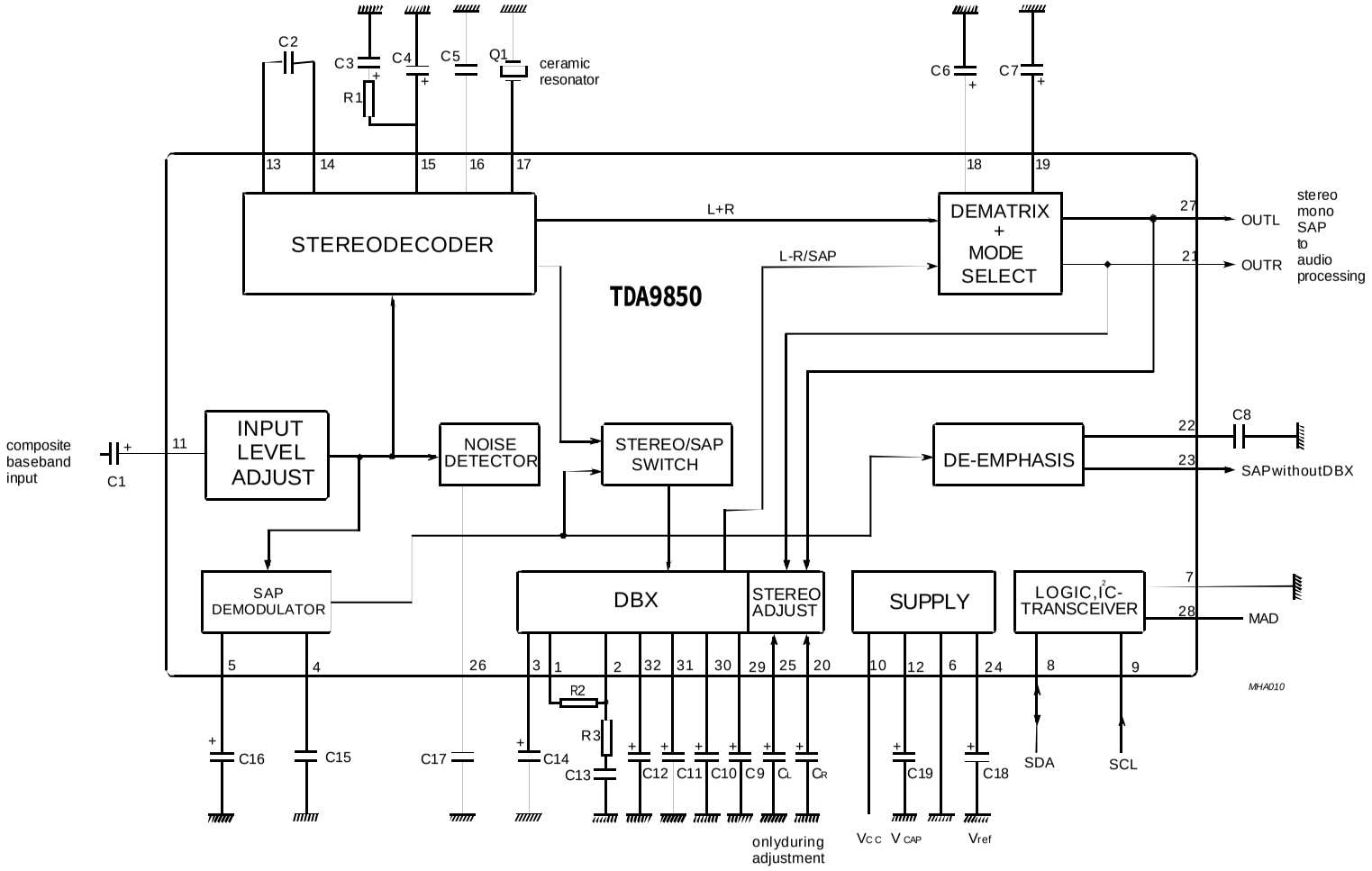
BLOCK DIAGRAM



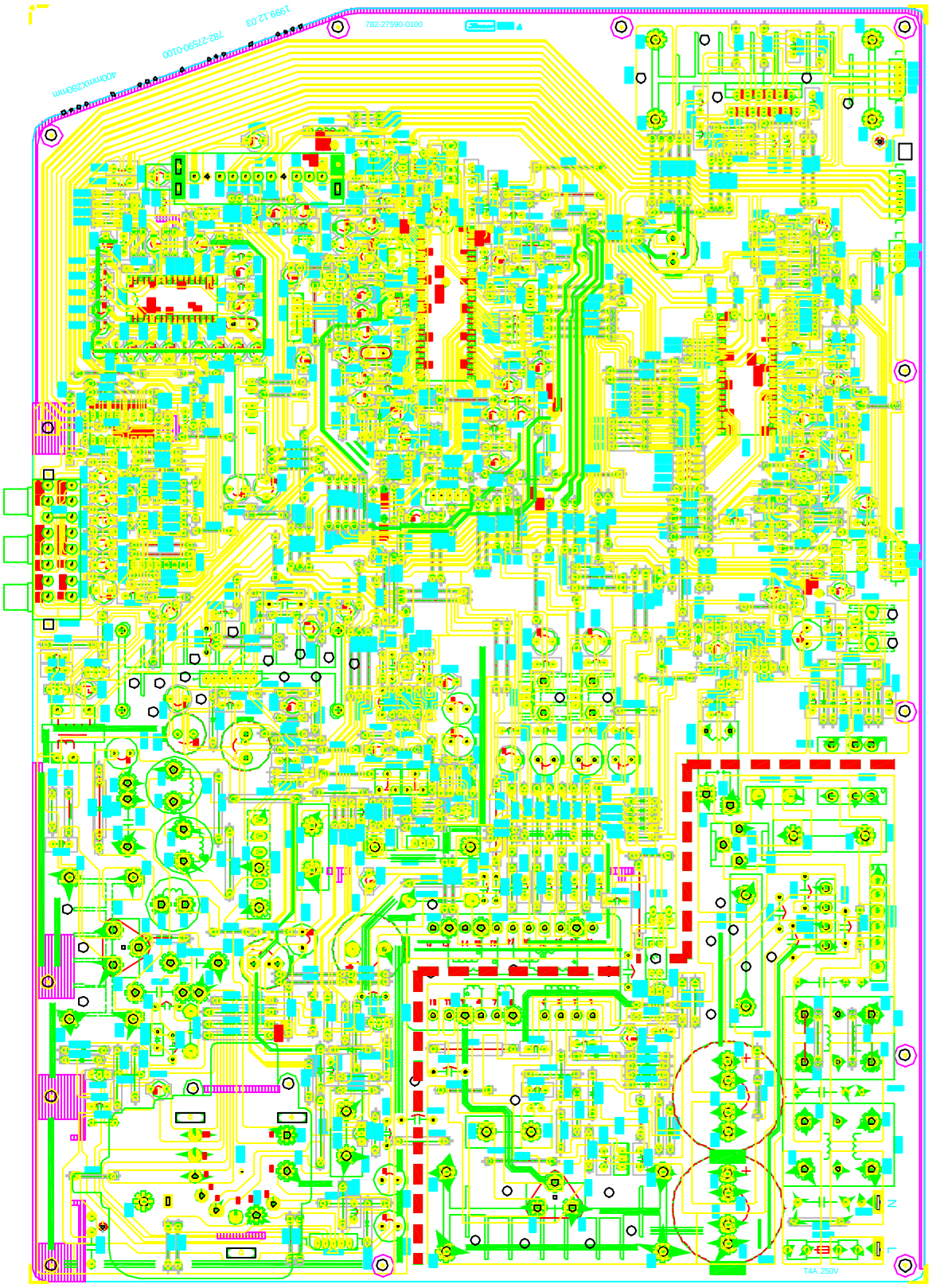
LA76814 ICBLOCKDIAGRAM



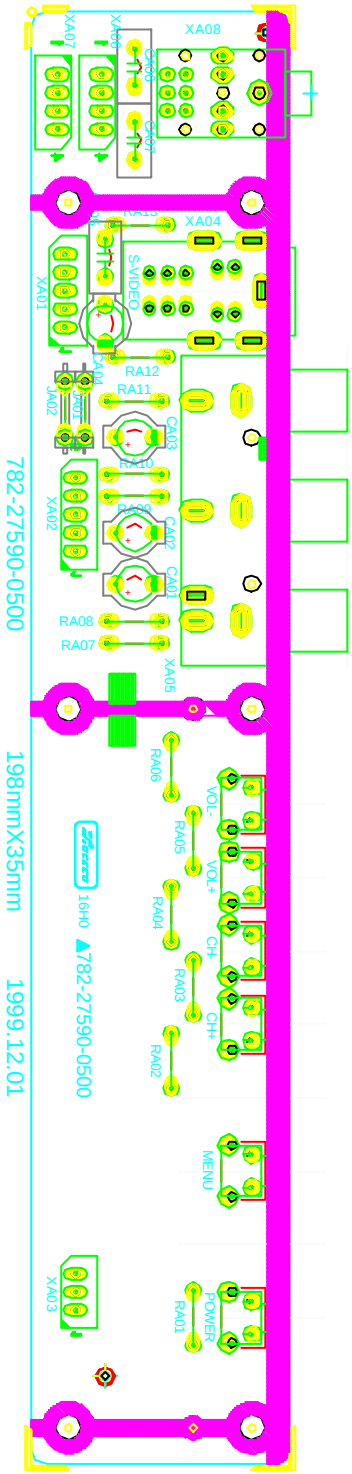
TDA9850 BLOCK DIAGRAM



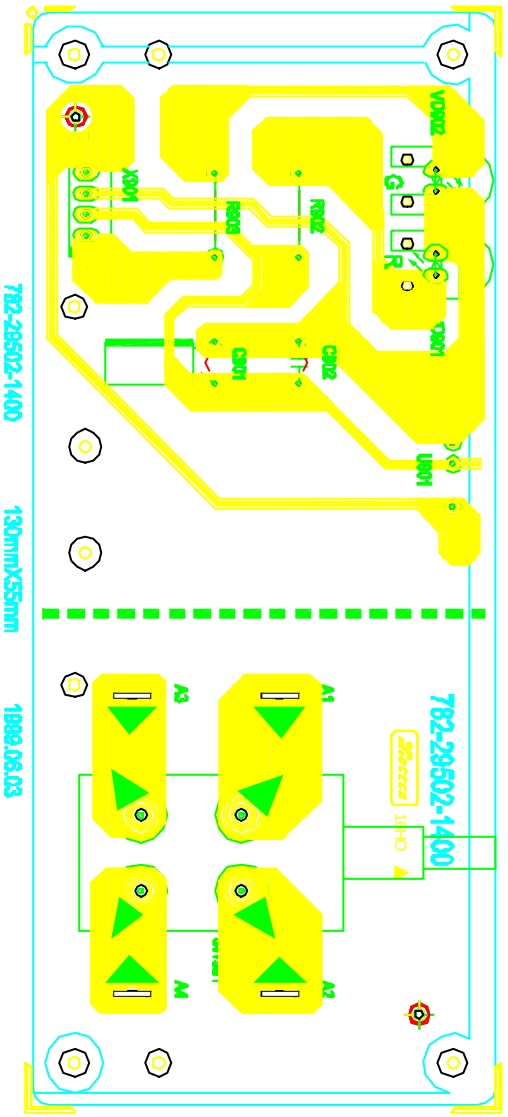
COMPONTENT VIEW OF MAIN BORAD



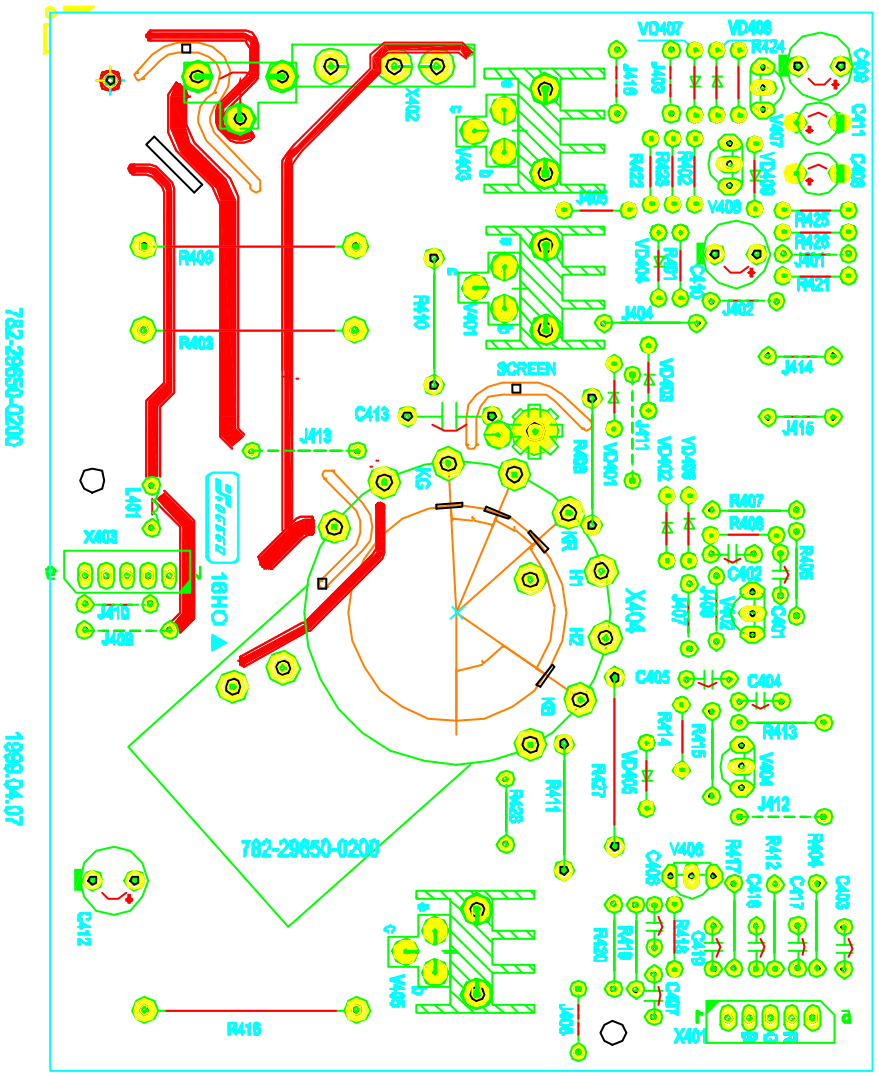
COMPONTENT VIEW OF KEY BORAD



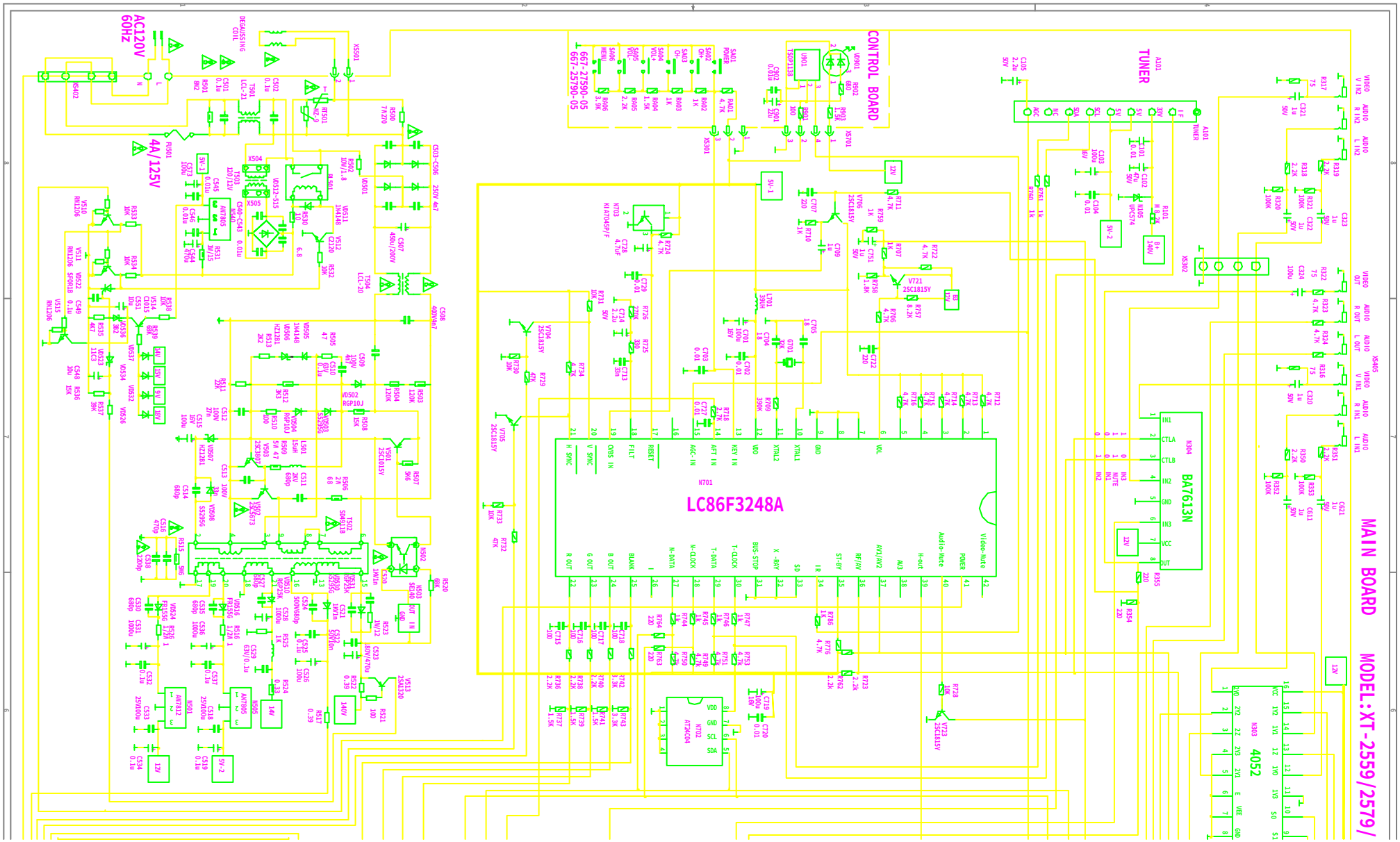
COMPONTENT VIEW OF INDICATOR BORAD



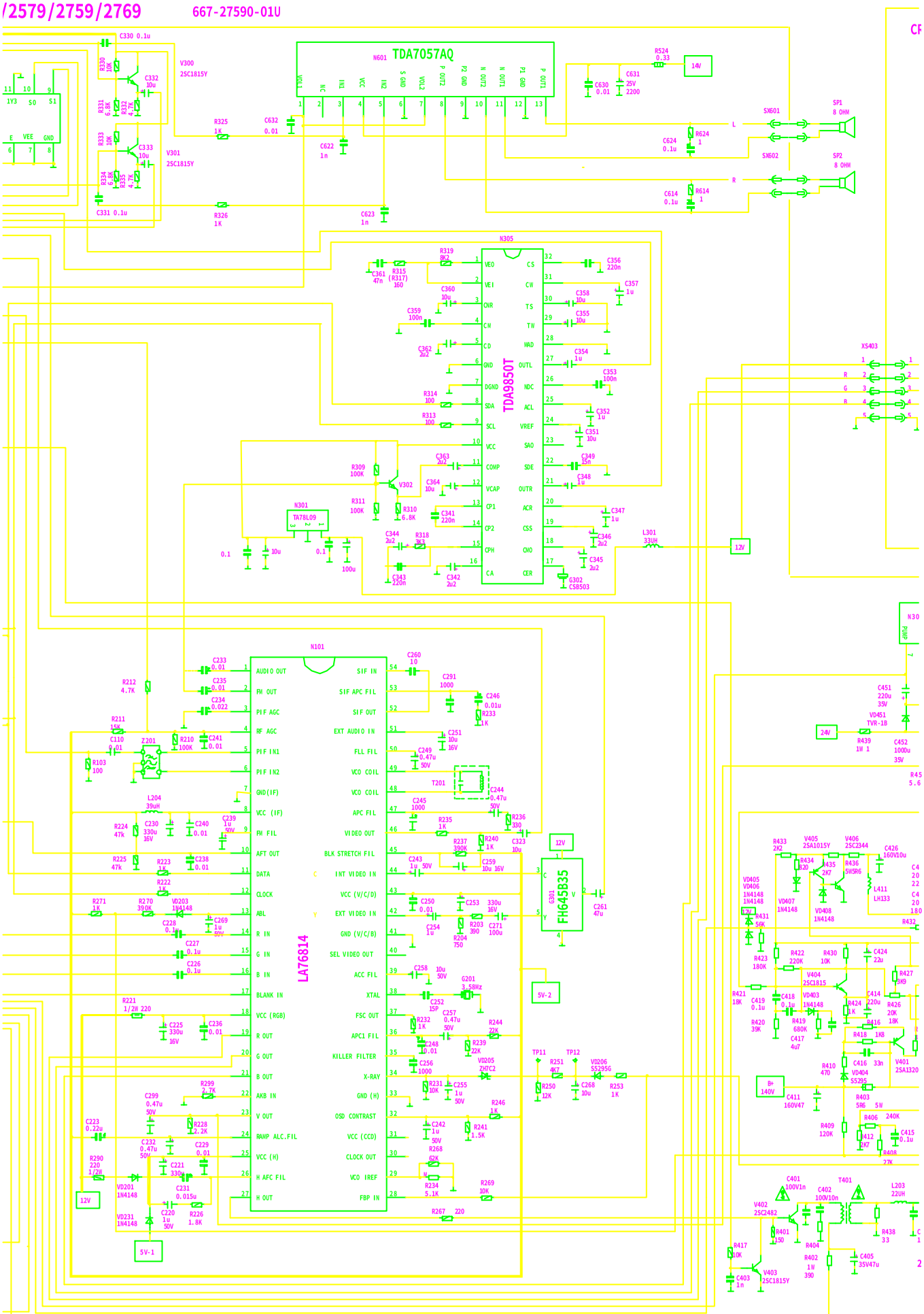
COMPONTENT VIEW OF CRT BORAD

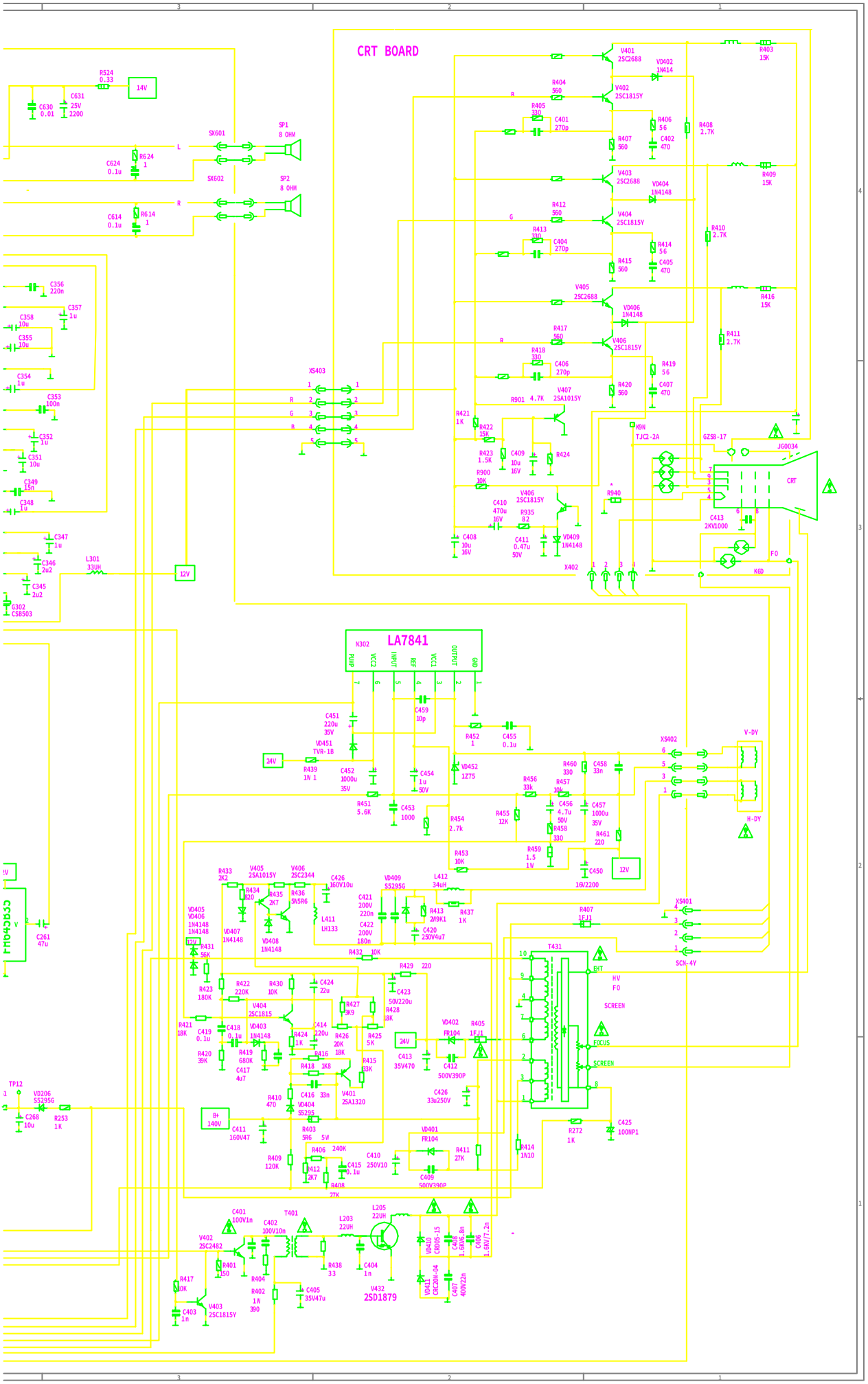


SHEMATIC DIAGRAM

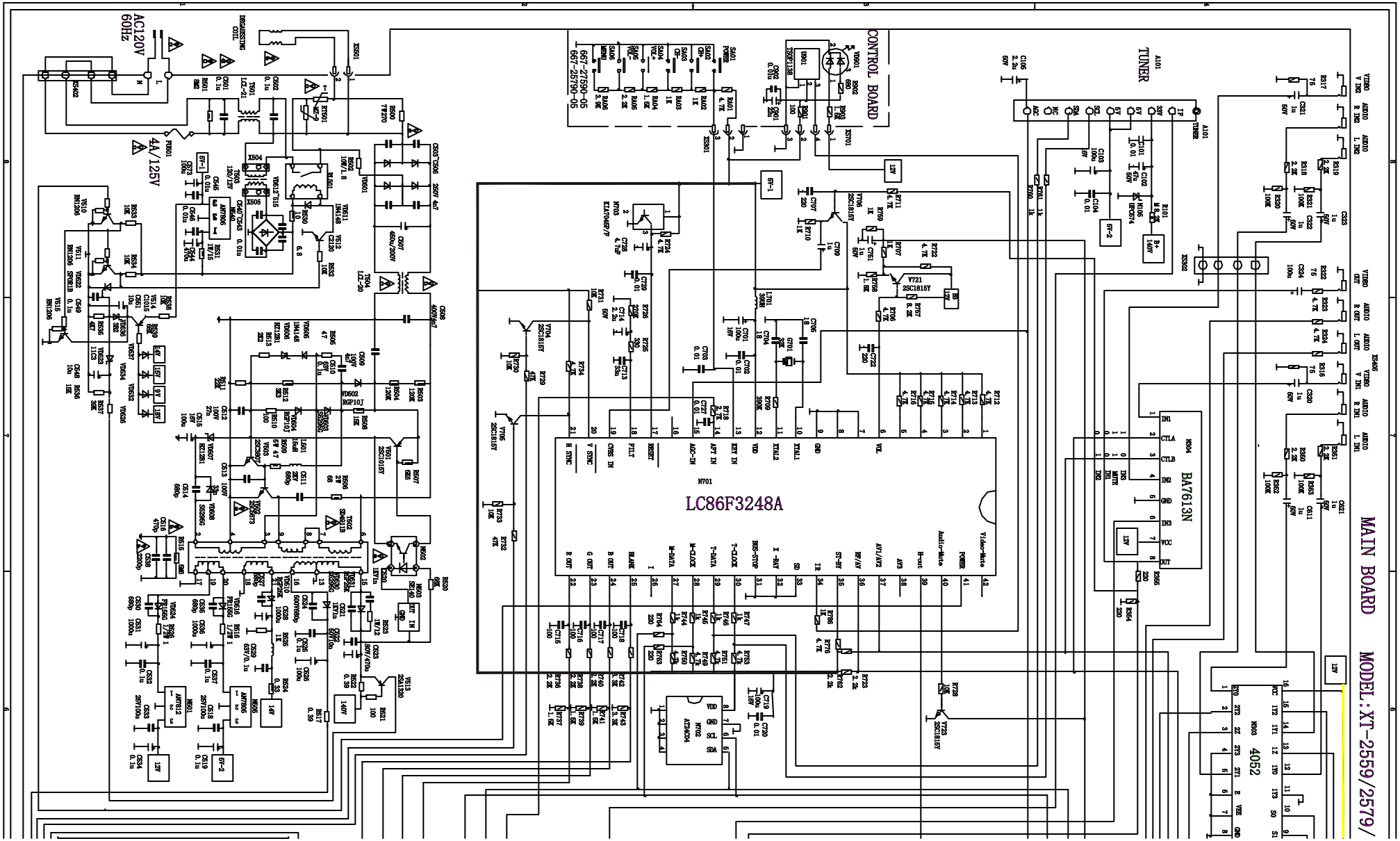


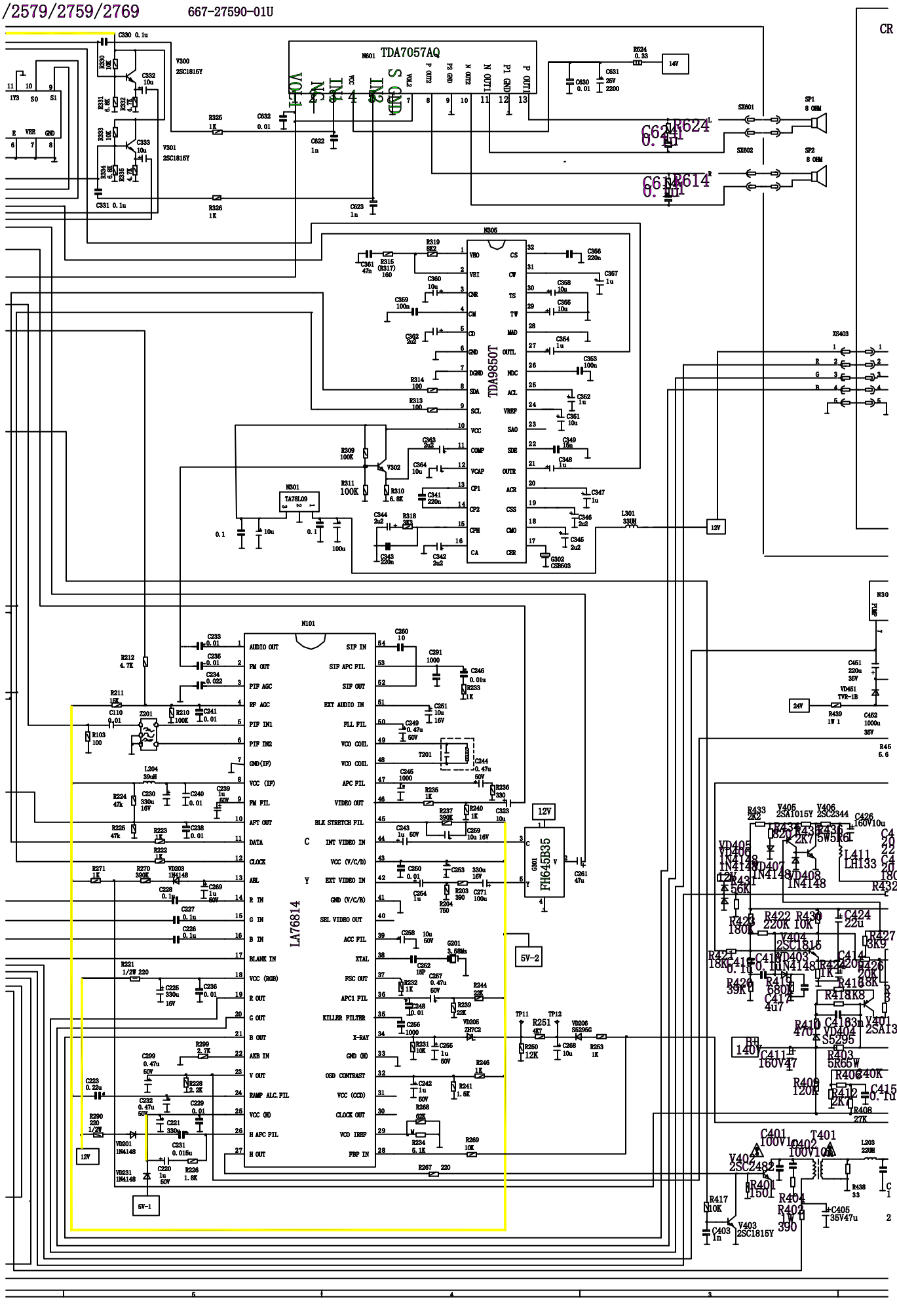
/2579/2759/2769 667-27590-01U

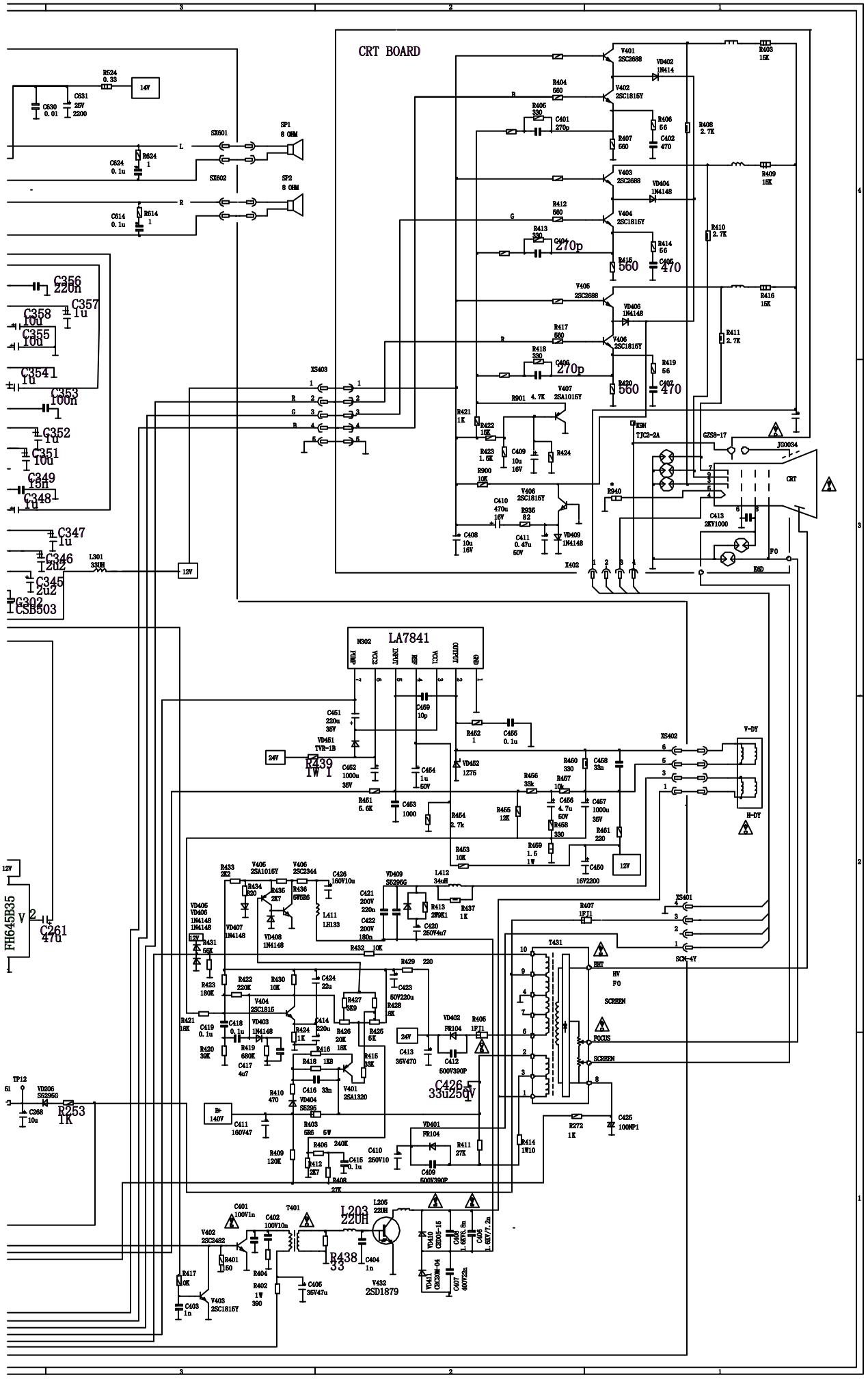



CRT BOARD
LA7841
N302
PUMP
VCC2
HPOUT
REF
VCC1
OUTPUT
GND
14V
12V
24V
Br
140V
SP1
8 OHM
SP2
8 OHM
SX601
SX602
XS403
X402
XS402
XS401
T431
T401
L205
22UH
2SD1879
TJC2-2A
GZSB-17
JG0034
CRT
K6D
K6N
V-DY
H-DY
SCN-4Y
FOCUS
SCREEN
EHT
HV
FO

XT2599 Revised Schematic




TDA7057AQ
TDA9850T
LA76814
FH645B35
TA78L09
2SC1815Y
2SA1015Y
2SC2344
2SC2482
S5295
5V-1
5V-2
12V
14V
24V


CRT BOARD
LA7841
N302
FBMP
VCC2
TOUT
HBP
VCC1
OUTPUT
GND
V401 2SC2688
V402 2SC1815Y
V403 2SC2688
V404 2SC1815Y
V405 2SC2688
V406 2SC1815Y
V407 2SA1015Y
V406 2SC1816Y
VD401 FR104
VD402 1N414
VD403 1N4148
VD404 1N4148
VD405 1N4148
VD406 1N4148
VD407 1N4148
VD408 1N4148
VD409 1N4148
VD451 TVR-1B
VD452 1276
VD409 S5296G
VD404 S5296
VD206 S5296G
X402
XS403
XS401
XS402
SCN-4Y
V-DY
H-DY
CRT
FO
SCREEN
FOCUS
HV
EHT
T431
T401
L203 22UH
L205 22UH
L301 33UH
L412 34uH
L411 LH133
V432 2SD1879
V402 2SC2482
V403 2SC1815Y
V404 2SC1815
V406 2SA1015Y
V406 2SC2344
V401 2SA1320
TP12
CSB603
FH645B35
SP1 8 OHM
SP2 8 OHM
SX601
SX602
JG0034
GZS8-17
7JC2-2A
12V
14V
24V
B+ 140V
270p
560
470
R901 4.7K
R939 1W 1
R940
C261 47u
R253 1K
C426 33u250V
C425 100NP1
R272 1K
R414 1W10
C411 160V47
C409 600V390P
C412 600V390P
C426 160V10u
C421 200V 220n
C422 200V 180u
C423 60V220u
C420 250V4u7
C410 250V10
C416 33n
C424 22u
C454 1u 50V
C455 0.1u
C456 4.7u 50V
C457 1000u 35V
C460 330
C461 220
C468 33n
C450 16V2200
C452 1000u 35V
C453 1000
C451 220u 35V
C459 10p
C413 2KV1000
C413 36V470
C417 4u7
C418 0.1u
C419 0.1u
C422 200V 180u
R451 5.6K
R452 1
R453 10K
R454 2.7k
R455 12K
R456 33K
R457 10K
R458 330
R459 1.5 1W
R460 330
R461 220
R462 1
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R1000 1K

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE " X – RAY RADIATION PRECAUTION" , " SAFETY PRECAUTION" AND " PRODUCT SAFETY NOTICE" ON PAGE 1&2 OF THIS MANUAL.

CAUTION: 1. The shaded areas makes in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with type identical to those in the original circuit or specified in the parts list. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 2.
2. Do not degrade the safety of the receiver through improper servicing.

ELECTRICAL PARTS LIST FOR MAIN BOARD

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
	782-27590-0100	MAIN PCB	
CRYSTAL			
G701	329-33204-00	32.768K	1
G201	329-53601-00	JA25A 3.579545MHZ	1
TRANSISTOR			
VD522	343-00420-404	SFORIB42	1
V405，V501，V514	343-10150-104	2SA1015Y Pr2.5	3
VD510，VD511，VD515	343-12040-004	RN1204	3
V401，V513	343-13200-00	2SA1320	2
V502	343-14030-00	2SD1403 !	1
V300，V301，V302，V404，V704	343-18150-104	2SC1815-Y	5
V705，V706，V721，V723	343-18150-104	2SC1815-Y	4
V512	343-21200-10	2SC2120-Y	1
V406	343-23440-30	2SC2344E	1
V402	343-23830-60	2SC2383-0	1
V432	343-25390-00	2SD2539	1
V101	343-27170-00	2SC2717	1
V503	343-38070-00	2SC3807	1
DIODE			
VD203	340-00001-00	1N4148	1
VD201,VD231,VD403,VD407,VD408,VD505	340-00001-003	1N4148	6
VD511,VD532,VD533,VD534,VD537	340-00001-003	1N4148	5
VD512，VD513，VD514，VD515	340-00003-003	IN4001	4
VD404	340-00010-00	S5295G	1
VD206，VD409，VD503，VD508，VD530	340-00010-003	S5295G	5
VD401，VD402，VD502，VD504	340-00014-003	RGP10J	4
VD531	340-00060-00	RGP25K	1
VD510，VD516，VD524	340-00064-003	RGP15J	3
VD410	340-00070-00	ERD07-15	1
VD411	340-00072-00	ERC20M-04	1
VD451	340-00086-003	TVR-1B	1
REGULATED DIODE			
VD202，VD536	340-50300-00	HZ3B2	2
VD205，VD523	340-50750-003	HZ7C2	2
VD506，VD507	340-51260-003	HZ12B1	2
RECTIFIER			

VD501	340-80015-00	RS405G	1
INTEGRATED CIRCUIT			
N503	352-01400-90	SE140N	1
N105	352-05740-00	uPC574	1
N502	352-06210-60	TLP621-GB	1
N702	352-24040-50	AT24C04	1
N701	352-32480-70	LC86F3248A	1
N303	352-40520-60	TC4052BP	1
N703	352-70390-10	KIA7039P	1
N601	352-70570-10	TDA7057AQ	1
N304	352-76130-90	BA7613N	1
N101	352-76814-20	LA76814K	1
N301	352-78009-10	TA78L009AP	1
N504，N505	352-78050-00	KA7805	2
N501	352-78120-50	LM7812CN	1
N302	352-78410-00	LA7841	1
N305	352-98500-00	TDA9850	1
CERAMIC CAPACITOR			
C459	459-2007D-902	RBU04SL070D-K46CA	1
C707	459-2010H-10	CC1-06-CH-63V-10PF-J	1
C252	459-2015H-102	CC45-CH1H150JYR	1
C260，C704，C705	459-2018H-102	CC45-CH1H180JYR	3
C262	459-2039H-202	CC45-RH1H390JYR	1
C722	459-2122H-20	CC1-12-RH-63V-221J	1
C256，C291，C453	459-2210K-002	CK45-B1H102KYR	3
C550	459-2247R-002	CT1-08-2E4-63V-472Z	1
C101, C104，C106，C107，C108	459-2310R-002	CK45-F1H103ZYR	5
C229，C236, C238，C240，C241	459-2310R-002	CK45-F1H103ZYR	5
C250，C325，C326, C340，C365	459-2310R-002	CK45-F1H103ZYR	5
C518，C533，C540，C541, C542	459-2310R-002	CK45-F1H103ZYR	5
C543，C545，C546，C632，C702	459-2310R-002	CK45-F1H103ZYR	5
C703，C720，C727	459-2310R-002	CK45-F1H103ZYR	3
C227	459-2410R-00	DD308-63F104Z50	1
C226，C228，C510，C525，C529	459-2410R-002	DD308-63F104Z50	5
C531，C537，C630	459-2410R-002	DD308-63F104Z50	3
C409	459-5139K-002	CK45-B2H391KYR	1
C412，C514，C524，C527，C530，C535	459-5168K-002	RQC06B681K-6H46UA	6
C522	459-5210K-00	RQC07B102K-H46CA	1
C521	459-6210K-00	DE0705B102K1K	1
C520	459-6215K-00	DE0905B152K1K	1
C508	459-6222R-00	DE0805E222Z1K	1
C511	459-8168K-00	DE0707B681K2K	1
C538	459-B147M-20	ECK-DNS471MBX	1
C516	459-B222M-20	ECK-DNS222MEX	1
C503，C504，C505，C506	459-B247R-00	DE0807F472ZAC250V	4
THIN – FILM CAPACITOR			
C401	462-00210-H0	CL11-100V-1000PF-J	1
C248，C249	462-00210-H02	CL11-100V-1000PF-J	2
C404	462-00222-H02	CL11-100V-2200PF-J	1

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
C509	462-00247-H02	CL11-100V-4700pF-J	1
C622，C623	462-00268-K0	CL11-100V-6800PF-K	2
C402	462-00310-H0	CL11-100V-0.01uF-J	1
C234，C246	462-00310-H02	CL11-100V-0.01uF-J	2
C231	462-00315-H0	CL11-100V-0.015uF-J	1
C349，C512	462-00315-H02	CL11-100V-0.015uF-J	2
C549	462-00322-H02	CL11-100V-0.022uF-J	1
C361	462-00347-K0	CL11-100V-0.047uF-K	1
C455	462-00410-K0	CL11-100V-0.1uF-K	1
C416，C458，C513，C713	462-21333-K0	CL21-100V-0.033uF-K	4
C460，C501，C502	462-2B410-M0V	250VAC-0.1uF-M	3
C421	462-53433-H0	CBB13-200V-0.33uF-J	1
C407	462-55322-H0	CBB12-400V-0.022uF-J	1
C425	462-83356-H0	CBB21-200V-0.056uF-J	1
C406	462-88268-H0	CBB81-1600V-6800pF-J	1
C408	462-88272-H0	CBB81-1600V-7200PF-J	1
C418，C419，C432	462-B0410-H0	CL21X-50V-0.1uF-J	3
C233，C330，C331，C353，C359,C415，C721	462-B0410-H02	CL21X-50V-0.1uF-J	7
C223，C356	462-B0422-H0	CL21X-50V-0.22uF-J	2
C341，C343	462-B0422-H02	CL21X-50V-0.22uF-J	2
C254，C269	462-B0510-H0	CL21X-50V-1uF-J	2
ELECTROLYTIC CAPACITOR			
C500，C507，C523	464-04747-M0R	200USP470MA35	3
C232，C244，C245，C257，C299	464-60447-M02	CD110-50V-0.47uF-M	5
C348，C352，C354	464-60510-M0	CD110-50V-1uF-M	3
C220，C239，C242，C243，C255，C259，C320	464-60510-M02	CD110-50V-1uF-M	7
C323, C347，C357，C454，C611，C621，C709	464-60510-M02	CD110-50V-1uF-M	7
C342，C346	464-60522-M0	CD110-50V-2.2uF-M	2
C105，C344，C345，C362，C363，C714	464-60522-M02	CD110-50V-2.2uF-M	6
C417，C456，C729，C751	464-60547-M02	CD110-50V-4.7uF-M	4
C358，C360	464-60610-M0	CD110-50V-10uF-M	2
C251，C258，C268，C332	464-60610-M02	CD110-50V-10uF-M	4
C333，C351，C355，C364	464-60610-M02	CD110-50V-10uF-M	4
C701	464-60622-M0	CD110-50V-22uF-M	1
C405，C424，C450，C573	464-60622-M02	CD110-50V-22uF-M	4
C102	464-60647-M0	CD110-50V-47uF-M	1
C551，C719	464-60647-M02	CD110-50V-47uF-M	2
C414，C423	464-60722-M0	CD110-50V-220uF-M	2
C422	464-65547-M0	CD288-250V-4.7uF-M	1
C410，C426	464-65633-M0	CD288-250V-33uF-M	2
C103，C221，C225，C230，C367	464-6D710-M0	CD110-16V-100uF-M	5
C515	464-6D710-M02	CD110-16V-100uF-M	1
C253	464-6D747-M0	CD110-16V-470uF-M	1
C366，C548	464-6E622-M02	CD110-25V-22uF-M	2
C261，C270，C324	464-6E722-M0	CD110-25V-220uF-M	3
C544	464-6E810-M0	CD110-25V-1000uF-M	1
C457	464-6E822-M0	CD110-25V-2200uF-M	1
C451，C452，C519，C534	464-6F710-M02	CD110-35V-100uF-M	4

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
C526，C528，C532，C536	464-6F747-M0	CD110-35V-470uF-M	4
C413，C631	464-6F810-M0	CD110-35V-1000uF-M	2
C427	464-R1610-T0	CD110HR-100V-10uF-T	1
CARBON RESISTOR			
R438	467-1C033-H03	1/6W-33Ω-J	1
R322，R355	467-1C047-H03	1/6W-47Ω-J	2
R316	467-1C075-H03	1/6W-75Ω-J	1
R103，R510	467-1C110-H03	1/6W-100Ω-J	2
R105	467-1C118-H03	1/6W-180Ω-J	1
R106，R266，R313，R314	467-1C122-H03	1/6W-220Ω-J	4
R461，R760，R761，R763，R764	467-1C122-H03	1/6W-220Ω-J	5
R209，R236，R458，R725	467-1C133-H03	1/6W-330Ω-J	4
R323，R324，R354，R410	467-1C147-H03	1/6W-470Ω-J	4
R107	467-1C156-H03	1/6W-560Ω-J	1
R267，R270	467-1C175-H03	1/6W-750Ω-J	2
R434	467-1C182-H03	1/6W-820Ω-J	1
R104，R222，R223，R232，R233，R235	467-1C210-H03	1/6W-1K-J	6
R240，R241，R246，R253，R272，R312	467-1C210-H03	1/6W-1K-J	6
R424，R710，R744，R745，R746，R747，R758	467-1C210-H03	1/6W-1K-J	7
R737，R739，R741	467-1C215-H03	1/6W-1.5K-J	3
R226，R412，R418	467-1C218-H03	1/6W-1.8K-J	3
R416，R719	467-1C220-H03	1/6W-2K-J	2
R228，R433，R513，R736，R738，R740	467-1C222-H03	1/6W-2.2K-J	6
R534	467-1C224-H03	1/6W-2.4K-J	1
R299，R435，R454，R718	467-1C227-H03	1/6W-2.7K-J	4
R310，R318，R742，R743	467-1C233-H03	1/6W-3.3K-J	4
R427	467-1C239-H03	1/6W-3.9K-J	1
R251	467-1C247-H0	1/6W-4.7K-J	1
R212，R532，R711，R734	467-1C247-H03	1/6W-4.7K-J	4
R749，R750，R751，R753	467-1C247-H03	1/6W-4.7K-J	4
R102，R332，R335，R451，R507，R728	467-1C256-H03	1/6W-5.6K-J	6
R535，R724	467-1C268-H03	1/6W-6.8K-J	2
R250，R319	467-1C282-H03	1/6W-8.2K-J	2
R453	467-1C291-H03	1/6W-9.1K-J	1
R211，R231，R269，R325，R326	467-1C310-H03	1/6W-10K-J	5
R430, R457，R533，R538，R707	467-1C310-H03	1/6W-10K-J	5
R712，R713, R714，R715，R716	467-1C310-H03	1/6W-10K-J	5
R730，R731，R757，R762，R765	467-1C310-H03	1/6W-10K-J	5
R455	467-1C312-H03	1/6W-12K-J	1
R536	467-1C315-H03	1/6W-15K-J	1
R330，R333，R421	467-1C318-H03	1/6W-18K-J	3
R239，R244，R331，R334，R511	467-1C322-H03	1/6W-22K-J	5
R208，R309，R311，R408，R733	467-1C327-H03	1/6W-27K-J	5
R415，R456，R759	467-1C333-H03	1/6W-33K-J	3
R420	467-1C339-H03	1/6W-39K-J	1
R224，R225，R428，R729	467-1C347-H03	1/6W-47K-J	4
R539	467-1C368-H03	1/6W-68K-J	1
R210，R351，R352，R732，R766	467-1C410-H03	1/6W-100K-J	5

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
R423	467-1C418-H03	1/6W-180K-J	1
R422	467-1C422-H03	1/6W-220K-J	1
R406	467-1C424-H03	1/6W-240K-J	1
R726	467-1C427-H0	1/6W-270K-J	1
R271，R709	467-1C439-H03	1/6W-390K-J	2
R237，R419	467-1C468-H03	1/6W-680K-J	2
R530	467-1D010-H0	RT14-1/4W-10Ω-J	1
J078	467-1E120-H0	1/2W-200Ω-J	1
R221，R290	467-1E122-H0	1/2W-220Ω-J	2
R460	467-1E133-H0	1/2W-330Ω-J	1
R273	467-1E210-H03	1/2W-1K-J	1
R411	467-1E327-H0	1/2W-27K-J	1
R503，R504	467-8E412-H0	1/2W-120K-JL !	2
R515	467-8E556-H1A	1/2W-5.6MΩ-J !	1
R501	467-8E582-H0A	1/2W-8.2MΩ-J !	1
METAL RESISTOR			
R356	467-2D110-G0	1/4W-100Ω-G	1
R521	467-2D110-G03	1/4W-100Ω-G	1
R315	467-2D116-G0	1/4W-160Ω-G	1
R525	467-2D210-G0	1/4W-1K-G	1
R234	467-2D247-F0	1/4W-4.7K-F	1
R537	467-2D339-F03	1/4W-39K-F	1
R452	467-2E001-H0	1/2W-1Ω-JL	1
R505	467-2E047-H0	1/2W-47Ω-JL	1
R404，R429	467-2E156-H0	1/2W-560Ω-JL	2
R512	467-2E233-H0	1/2W-3.3KΩ-JL	1
R508	467-2E315-H0	1/2W-15kΩ-JL	1
R531	467-2F068-H0	1W-68Ω-JL	1
R437	467-2F210-H0	1W-1KΩ-JL	1
R523	467-2G012-H0	2W-12Ω-JL	1
R506	467-2G068-H0	2W-68Ω-JL	1
R101	467-2G282-H0	2W-8.2kΩ-JL	1
R413	467-2G291-H0	2W-9.1kΩ-JL	1
R514	467-2G320-H0	2W-20K-JL	1
R520	467-2G368-H0	2W-68K-JL	1
R522	467-2GB68-H0	2W-0.68Ω-JL	1
FUSIBLE RESISTOR			
R252	467-4EA36-H0	1/2W-3.6Ω-JL	1
R439，R516，R526	467-4F001-H0	1W-1Ω-JL	3
R414	467-4F010-H0	1W-10Ω-JL	1
R405(two parallel)，R517，R524	467-4FB33-H0	1W-0.33Ω-JL	4
CEMENT RESISTOR			
R509	467-50039-H1	RX27-3Y-5W-39Ω-J !	1
R403，R436	467-50A56-H1	RX27-3Y-5W-5.6Ω-J !	2
R500	467-51127-H0	RX27-3Y-7W-270Ω-J!	1
R502	467-53A18-H0	RX27-3Y-10W-1.8Ω-J!	1

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
WIREWOUND RESISTOR			
R459	467-6F001-H0	RX21-1-1Ω-J	1
THERMAL RESISTOR			
RT501	469-10023-00	96708	1
POTENTIOMETER			
R425	468-32507-00	EVND8A-A03-B53	1
R426	468-33207-00	EVND8A-20K	1
INDUCTOR WITH COLOUR CODES			
L201，L501	471-1015H-00	EL0606SKI-150J	2
L102，L204，L206,L701	471-2039K-00	SPT0305-390K-5	4
L101	471-2B56K-A0	SP0203-0.56uH-K	1
REMOTE CONTROL TRANSFORMER			
T503	470-00194-00	E412005B !	1
H-DRIVE TRANSFORMER			
T401	472-10035-00	DE1933	1
FBT			
* T431(25″)	472-25105-00	BSC26-3902A !	1
* T431(27″)	472-27109-00	BSC29-3910A !	1
CERAMIC RESONATOR			
G302	475-34506-00	CSB503F58	1
H - LINEARITY COIL			
L412	477-00050-00	HL1830H-X01	1
POWER FILTER			
T504	477-20030-00	LCL-20 !	1
T501	477-20031-00	LCL-21 !	1
SAW FILTER			
Z201	458-07005-00	F5221	1
FIXED INDUCTANCE			
L411	477-40111-00	LH133	1
IFT			
T202	477-60028-00	7TR4501	1
RELAY			
RL501	457-12003-9G	JQX-14FF-012-1HS !	1
OTHERS			
* CRT(25″)	335-2512F-00	64SX502Y22-DC02	1
* CRT(27″)	335-29123-00	A68KTB359X005	1
SPEAKER	384-40508-N1	SG04D058	2
SPEAKER	384-41908-S0	YDTG37-1	2
* DEGAUSSING COIL(25″)	477-12504-00	DX-25 !	1
* DEGAUSSING COIL(27″)	477-12904-00	DX-29 !	1
* POWER CORD(25″)	491-7021C-02	UL !	1
* POWER CORD(27″)	491-70240-02	UL !	1
FUSE	569-14141-00	50T T4A 250V !	1
TUNER	590-40708-00	115-B-8035AJ !	1
AV SOCKET	364-92207-00	YKC21-2201	1
SWITCH TRANSFORMER	470-00192-00		1

ELECTRICAL PARTS LIST FOR CRT BOARD

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
	782-29650-020A	CRT PCB	
DIODE			
VD402，VD404，VD406，VD407，VD408，VD409	340-00001-00	1N4148	6
TRANSISTOR			
V407	343-05622-10	2SA562TM-Y	1
V402，V404，V406	343-18150-11	2SC1815-Y	3
V408	343-21200-10	2SC2120-Y	1
V401，V403，V405	343-26880-60	2SC2688M	3
CERAMIC CAPACITOR			
C417，C418，C419	459-2110H-10	CC1-10-CH-63V-101J	3
C401，C404，C406	459-2127H-90	CC1-08-SL-63V-271J	3
C402，C405，C407	459-2147H-90	CC1-12-SL-63V-471J	3
C413	459-8222K-00	DE1005B222K2K	1
ELECTROLYTIC CAPACITOR			
C411	464-60447-M0	CD110-50V-0.47uF-M	1
C403	464-60647-M0	CD110-50V-47uF-M	1
C412	464-65610-M0	CD288-250V-10uF-M	1
C408	464-6D610-M0	CD110-16V-10uF-M	1
C409	464-6D722-M0	CD110-16V-220uF-M	1
C410	464-6D747-M0	CD110-16V-470uF-M	1
CARBON RESISTOR			
R402	467-1C022-H0	1/6W-22Ω-J	1
R406，R414，R419	467-1C056-H0	1/6W-56Ω-J	3
R425，R426	467-1C075-H0	1/6W-75Ω-J	2
R405，R413，R418，R423	467-1C127-H0	1/6W-270Ω-J	4
R404，R412	467-1C156-H0	1/6W-560Ω-J	2
R417	467-1C156-H0	1/6W-560Ω-J	1
R422	467-1C168-H0	1/6W-680Ω-J	1
R407，R415，R420，R424	467-1C210-H0	1/6W-1K-J	4
R421	467-1C212-H0	1/6W-1.2K-J	1
R401	467-1C247-H0	1/6W-4.7K-J	1
R408，R410，R411	467-8E227-H0A	1/2W-2.7KΩ-J !	3
METAL RESISTOR			
R403，R409，R416	467-2G315-H0	2W-15kΩ-JL	3
* R427(25〃)	467-2GB68-H0	2W-0.68Ω-JL	1
* R427(27〃)	467-2GA18-H0	2W-1.8Ω-JL	1
INDUCTOR WITH COLOUR CODES			
L401	471-1110H-00	EL0606SKI-101J	1
3-PIN CONNECTOR			
X402	364-33102-00	W-P3003	1
CRT SOCKET			
X404	364-58210-00	GZS10-2-102G !	1

ELECTRICAL PARTS LIST FOR LED BOARD (XT-2799/27A9)

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
	782-29502-1400	LED PCB	
INTEGRATED CIRCUIT			
U901	352-11380-00	TSOP1138 (D)	1
LED DIODE			
VD902	340-10021-50	2EF565 (GREEN)	1
VD901	340-10039-20	HFR205 (RED）	1
CERAMIC CAPACITOR			
C902	459-2310R-00	CT1-08-2F4-63V-103Z	1
ELECTROLYTIC CAPACITOR			
C901	464-6E622-M0	CD110-25V-22uF-M	1
CARBON RESISTOR			
R902	467-1C210-H0	1/6W-1K-J	1
R903	467-1C218-H0	1/6W-1.8K-J	1

ELECTRICAL PARTS LIST FOR BUTTON BOARD (XT-2799/27A9)

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
	782-27590-0500	BUTTON PCB	
AV SOCKET			
XA05	364-93202-00	AV306-2	1
S-TERMINAL			
XA04	364-91202-00	CKX5-2K-2	1
CERAMIC CAPACITOR			
CA05	459-2210K-00	CT1-06-2B4-63V-102K	1
ELECTROLYTIC CAPACITOR			
CA03，CA04	464-60510-M0	CD110-50V-1uF-M	2
CA01，CA02	464-60610-M0	CD110-50V-10uF-M	2
CARBON RESISTOR			
RA11，RA12，RA13	467-1C082-H0	1/6W-82Ω-J	3
RA02，RA03	467-1C210-H0	1/6W-1K-J	2
RA04	467-1C215-H0	1/6W-1.5K-J	1
RA05	467-1C222-H0	1/6W-2.2K-J	1
RA06	467-1C239-H0	1/6W-3.9K-J	1
RA01，RA08，RA09	467-1C247-H0	1/6W-4.7K-J	3
RA07，RA10	467-1C410-H0	1/6W-100K-J	2

ELECTRICAL PARTS LIST FOR BUTTON BOARD (XT-2579)

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
	782-25790-0500	BUTTON PCB	1
LED DIODE			
VD901	340-10061-20	HFR244	1
VD902	340-10062-50	HFG244	1
INTEGRATED CIRCUIT			
U901	352-11380-00	TSOP1138	1
TOUCHING SWITCH			
SA01，SA02，SA03，SA04，SA05，SA06	360-10001-00	KFC-A06-A02	6

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
CERAMIC CAPACITOR			
C902	459-2210K-00	CT1-06-2B4-63V-102K	1
ELECTROLYTIC CAPACITOR			
C901	464-60647-M0	CD110-50V-47uF-M	1
CARBON RESISTOR			
R901	467-1C110-H0	1/6W-100Ω-J	1
R902	467-1C156-H0	1/6W-560Ω-J	1
R903，RA02，RA03	467-1C210-H0	1/6W-1K-J	3
RA04	467-1C215-H0	1/6W-1.5K-J	1
RA05	467-1C222-H0	1/6W-2.2K-J	1
RA06	467-1C239-H0	1/6W-3.9K-J	1
RA01	467-1C247-H0	1/6W-4.7K-J	1

ELECTRICAL PARTS LIST FOR BUTTON BOARD (XT-2599)

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
	782-25990-0500	BUTTON PCB	
LED DIODE			
VD901	340-10061-20	HFR244	1
VD902	340-10062-50	HFG244	1
INTEGRATED CIRCUIT			
U901	352-11380-00	TSOP1138(D)	1
TOUCHING SWITCH			
SA01-SA06	360-10001-00	KFC-A06-A02	6
CERAMIC CAPACITOR			
C902	459-2210K-00	CT1-06-2B4-63V-102K	1
ELECTROLYTIC CAPACITOR			
C901	464-60647-M0	CD110-50V-47uF-M	1
CARBON RESISTOR			
R901	467-1C110-H0	1/6W-100Ω-J	1
R902	467-1C156-H0	1/6W-560Ω-J	1
RA02，RA03，R903	467-1C210-H0	1/6W-1K-J	3
RA04	467-1C215-H0	1/6W-1.5K-J	1
RA05	467-1C222-H0	1/6W-2.2K-J	1
RA06	467-1C239-H0	1/6W-3.9K-J	1
RA01	467-1C247-H0	1/6W-4.7K-J	1

ELECTRICAL PARTS LIST FOR SIDE AV BOARD (XT-2579)

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
	782-25790-2900	SIDE AV PCB	
ELECTROLYTIC CAPACITOR			
CA05	459-2210K-00	CT1-06-2B4-63V-102K	1
CA03	464-60510-M0	CD110-50V-1uF-M	1
CA01，CA02	464-60610-M0	CD110-50V-10uF-M	2
CARBON RESISTOR			
RA11，RA13	467-1C082-H0	1/6W-82Ω-J	2
RA08，RA09	467-1C247-H0	1/6W-4.7K-J	2
RA07，RA10	467-1C410-H0	1/6W-100K-J	2

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
AV SOCKET			
XA05	364-92210-00	417	1

ELECTRICAL PARTS LIST FOR SIDE AV BOARD (XT-2599)

SYMBOL	PART NO.	DESCRIPTION	QUANTITY
	782-25990-2900	SIDE AV PCB	
ELECTROLYTIC CAPACITOR			
CA05	459-2210K-00	CT1-06-2B4-63V-102K	1
CA02，CA04	464-60510-M0	CD110-50V-1uF-M	2
CA01，CA03	464-60610-M0	CD110-50V-10uF-M	2
CARBON RESISTOR			
RA11，RA12，RA13	467-1C082-H0	1/6W-82Ω-J	3
RA08，RA09	467-1C247-H0	1/6W-4.7K-J	2
RA07，RA10	467-1C410-H0	1/6W-100K-J	2
S-TERMINAL			
XA04	364-91202-00	CKX5-2K-2	1
AV SOCKET			
XA05	364-93202-00	AV306-2	1

NOTE: The items marked with "*****" mean that the relevant partsare different according to CRT size (25″ or 27″).